

The Keyboard is Mightier than the Sword

“You have twenty minutes; ready...and begin”. With these instructions, 150 police officer applicants, hoping to become members of academy class 2010, hurriedly began typing on their keyboards. This was the first phase of a series of tests to determine the computer and technology skills of an eager group of candidates. Later, the candidates would develop a brief PowerPoint presentation, download documents and photographs to a thumb drive and navigate global positioning technology. With the wide-scale use of technology in the policing environment, this scenario just may become the entry level law enforcement applicant test of the future.

As the need to recruit the tech-savvy candidate grows, previous pen-and-pencil tests and outdated measures of physical strength to measure suitability for hire as a cop or deputy might become as relevant to the job of a twenty-first century cop as the Wright Brother's aircraft might be to the contemporary fighter pilot. The advent of technology as a norm in law enforcement creates questions regarding the relevance of time-worn means of assessing candidates for the police academy. In fact, the current written and physical agility tests may become a thing of the past. It is time to ask the tough questions, and seek the right answers, about what we do to find the “best” peace officers for the next generation. To do less will mean our hiring pool will not only get shallower, but also deliver to our police and sheriff's departments personnel who may not be able to cope with the demands of today's electronic policing environment

The Impact of Technology

Technology and innovation will continue to impact and influence the manner in which police services are provided to a community. For instance, field officers have increasingly become more self-sufficient because of the high-tech equipment they possess. They grew up with Ipods, text messaging on their cell phones, trading thoughts on MySpace.com and interacting with their electronic neighbors as a matter of fact. Forcing them into a pencil-and-paper work environment may stunt their ability to help the organization move into the future. If managed correctly, technology will assist law enforcement organizations to become more effective and efficient in reducing and preventing crime. For example, officers use handheld devices to accurately identify subjects they contact, thus arresting wanted subjects and releasing innocent parties. Knowing that technology will continue to advance, it is imperative for law enforcement organizations to recruit effectively for the challenges of the ever-changing technological environment. Considering the road ahead, how will these advancements in the technological environment impact the selection of the next generation of peace officers? Are the skills valued in past years still relevant? If not, how do we turn the profession “into the wind” and set a different heading? How do we pick the right recruits, and then how do we integrate them into a culture not generally known for embracing change?

Technology: Where are we going?

Technology, information and knowledge continue to accelerate at a rapid pace. Alvin Toffler stated it took humanity 50,000 years to acquire one “unit” of knowledge and 1,500 years more to double the first unit. By the 1970’s, the pace of change had

accelerated, and units of knowledge doubled every six years. Recently, Toffler forecast by 2012, units of knowledge will double annually.¹ Scientific advances have propelled technological innovation at an ever-increasing pace. The peace officer of the emerging century will have to employ new skills and competencies.

The cop of the new age may complete much of their training in simulated environments, use investigative tools considered to be in the realm of science fiction not so many years ago and transform the police profession just to keep pace with changes in the larger society they are charged to protect. Consider just two ways advances in technology might alter the landscape for the officer or deputy in the emerging reality:

- ❖ Biometrics, the automated method of recognizing a specific person based on physiological or behavioral characteristics (including face, fingerprint, DNA, hand geometry, handwriting, iris, retinal, vein and voice recognition²) is already in use by many private and public sector organizations to provide security authentication through positive identification of individuals. Biometrics is accurate, convenient, can provide an audit trail and is becoming more socially accepted and cost efficient. It could be adapted to accurately identify each person a police officer contacts in the field and during investigations.
- ❖ In a lecture given in late 2004, Professor Gene Stephens described the “Bio-logic age,” the emerging reality of blending computer hardware and software with the DNA of its user.³ One foreseeable development would be organic computers that

¹ Communications Revolution Just Waiting to Happen, Alvin Toffler, available: www.indiainfoline.com

² The Biometric Consortium Website, available: www.biometrics.org

³ Gene Simmons, University of South Carolina, Lecture to POST Command College Class 38, December 8, 2004

learn and adapt in ways only possible now by humans. Another is the use of biochips. Biochips could provide a boost to the user's useful intelligence by implanting linguistic implants to communicate across spoken boundaries to speak with someone fluent only in a foreign language. Artificial intelligence implants might even eliminate the educational requirements mandated by law enforcement training governing bodies. Consider; officers could have an organic "hard drive" of information implanted into their bodies thus eliminating or minimizing other traditional learning processes.

Biometrics and Bio-logics are merely two of the more advanced potential applications for use by future generations of police officers. Certainly, there are others, all sharing one common trait: The user (e.g., cop in the street) will have to be tech-savvy to maximize their use.

Technology: Why does law enforcement care?

Innovative products are evident in today's law enforcement profession. Look around; the evidence of the intrusion of interactive electronics into the police environment is everywhere:

- ❖ Computers are commonplace in the law enforcement environment. Patrol cars are equipped with computers for dispatching, mapping, report writing and many other uses. Computers are issued to police officer trainees at some police academies.

- ❖ Automated systems are used to identify crime trends and analyze those trends with little or no human intervention except to program search parameters and derive the data
- ❖ Handheld, Internet-capable devices now assist officers as they investigate activity away from their police cars.
- ❖ Voice activation recognition software, global positioning systems, mapping software and audio/video components are all already in use in agencies across the nation.
- ❖ Field-based reporting systems are becoming commonplace in the profession. To reduce the amount of paper flow and improve efficiency, these systems allow officers to generate their own reports and forward them to supervisors for approval via e-mail or through secure web connections.

As self-sufficient computers and technology may be, they still require a person with the knowledge necessary to operate them proficiently. Even today, a cop would be lost if he or she didn't possess the skills necessary to keyboard entries into report fields or generate text in word processing. Truthfully, the more skilled a cop is with these skills the more productive they will become.

Relevancy: So where's the connection?

Technology and the adoption of technology in the police profession will continue to intensify. This reality will inevitably drive changes in the standards and core job dimension requirements for those hoping to work in the new police technology

environment. Should law enforcement agencies continue the same recruitment and selection strategies based on an environment that existed 10-30 years ago, or seek to recruit an applicant according to a forecasted technology-rich future?

In California, the Commission of Peace Officers Standards and Training ~~or POST~~ governs the selection and training of police personnel. The standards of entry-level employment for peace officers mandate specific minimal qualifications based on training, values, age, physical ability and other criteria. These standards are a baseline and do not account for other environmental changes in society such as advancements in technology. California Government Code 1029 and 1031 set forth disqualifiers and minimum qualifications for persons to hold an office as a police officer. Code section 1029 lists a variety of subsections that disqualifies persons who have been convicted of a felony, those determined to be a mentally disordered sex offender or any person in danger of becoming addicted to narcotics.⁴ Government Code Section 1031 states in-part that police officers shall be at least 18 years of age, be a high school graduate or pass the General Education Development Test or pass the California High School Proficiency Exam.⁵ Individual police and sheriff departments may impose more stringent standards. For example, an applicant must be at least 21 years of age at the time of appointment. Other examples include standards reference drug usage and the operation of motor vehicles. These standards are imposed to maintain the integrity and professionalism of law enforcement and designed to select the most qualified candidates. However, these standards do not test an applicant's ability, competency or knowledge of their technology

⁴ Official California Legislative Information Website, available: www.leginfo.ca.gov

⁵ Official California Legislative Information Website, available: www.leginfo.ca.gov

related skills that are becoming more and more crucial in the law enforcement profession. This issue is intensified when one considers the emergence of workers who have seemingly been “wired” from birth.

The Generation Gaps

Social scientists have identified specific time parameters as generational periods within our culture. The people born within these timeframes are associated with certain traits and characteristics consistent with the group as a whole. Irv Gamal, the President and CEO of the consulting firm Insight Systems Group, identified the following:

- Baby boomers, 76.7 million born 1946-1964,
- Generation X, 44 million born 1965-1977
- Generation Y, 29 million born 1978-1984

Some general characteristics of “Boomers” (three-quarters of whom were raised by stay-at-home moms) include not questioning authority, to work hard and become rewarded, an adherence to an organization’s hierarchy and responding to the world with values shaped by the impact of television. Generation X was often raised by two-income families, 40 percent were children of divorce, their culture was shaped by MTV and CNN and they were weaned on technology at an early age. Generation Y have been raised by active involved parents, never experienced life without computers, committed to a college education and are technology savvy. On the heels of Generation Y is yet another group; this one has traits and capacities some see as radically different than their predecessors. In her article titled “Managing Millenials,” Clare Raines identified the Millenials as the

group born between 1980-2000.⁶ She described the Millennials as confident, goal oriented and civic minded. The Millennials are the first group raised in a culture surrounded by the digital media. The Millennials are shaped by a focus on children and family, their lives are highly structured by parents and teachers who have micro-managed their schedules, and they interact within a multi-cultural society.

These generational characteristics are evident in the law enforcement profession. Veteran officers (the early Boomers) may be reluctant or apprehensive to new technology processes. This gap is intensified between Generation Y and Baby Boomers. Generation Y grew-up with interactive technology, text messaging and instant information, in contrast to the baby boomers who grew-up with the passive and one-way information flow of television. Although the emergence of Gen Y and younger workers bodes well for the future of policing, their supervisors and managers may often have far less aptitude or desire to integrate advances in the electronic realm. Of course, the Millennials might have difficulty imagining a workplace that was not interactively wired, and look strangely at those of us who might refer to the “life before computers” from a perspective where that has never been true.

The law enforcement officer of today needs to be more versed in the use and applications of computers, computer software and other forms of technology. Tomorrow’s cop or deputy may grapple with an entirely new realm of integrated automation at the leading edge of crime-fighting. For example, Biometrics can be adapted to the use of police equipment, including voice recognition report writing software and the operation of

⁶ See Generations at work, www.generationsatwork.com, Managing Millennials by Claire Raines, 2002

police equipment within a patrol car. The applicant of the future may need to be a virtual reality game player to interact with bio-logic implants or outerwear. Even one bold step further, the officer assistant of the future may virtually control the movements and actions of a robot as it provides police services making the presence of a live officer essentially obsolete. Each of these examples requires a sophisticated knowledge, skill and techno savvy.

Although Generation Y will bring a different skill set and perspective to the profession than their aging counterparts, it will be incumbent upon organizations to find and employ candidates that possess the knowledge and skills to interact with future police technology. With a need for more than 800,000 new peace officers in the next two decades to replace retiring Boomers,⁷ it is imperative for law enforcement leaders to recruit differently, and to assess differing skills, than those used for the cops of the past. To exemplify the need for change, consider a glimpse into the possible future.

Where do we go from here?

Imagine a 23 year old college graduate with a degree in Information Technology walking down an aisle at a computer tradeshow convention. The graduate stands in front of a booth and marvels at the display of intriguing technology which is showcased. The graduate begins to handle the devices, manipulate buttons, and attach things to his body that stimulate each of his senses. The graduate is astonished with the level of advanced

⁷ See Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Law Enforcement Statistics Summary Findings 2000, available: www.ojp.usd05-gov/bjs/lawenf.htm

technology at his fingertips as he gazes upward to read the booth's display banner. The graduate is shocked to discover he is standing in front of a police recruitment booth.

This setting is an example of the type of recruiting and outreach needed to hook the technology competent candidate. The "computer geek" stereotype of the 1960's and 70's depicted in the movie, "Revenge of the Nerds" is no longer relevant. Today's group of Millennials does not fashion themselves in white business shirts, pocket protectors, thick lens glasses and white socks with dress shoes. The group is now both male and female; they clothe themselves in the latest fashions and encompass all social and economic groups. This group can be found engaging one another at any number of the internet coffee houses throughout the United States. Consequently, law enforcement needs to find, reach out and entice Generation Y and the Millennials into the technology dependent profession of the future or face the prospect of a workplace that relies on outsourcing the very talents needed to succeed in policing.

Law enforcement would benefit from actively recruiting at technology trade schools which offer specific instruction in technology related fields of study. Trade schools offer students who are versed in a variety of computer related skills. Creating partnerships and working collaboratively with school administrators opens inroads and access to the student population for orientation and recruitment purposes. Student groups could develop programs and products assigned to them from local law enforcement agencies. Examples of these include video production, computer program development, technology research and training. While engaged in these types of partnerships, law enforcement

should be mindful of the opportunities to educate the student and consider them as a potential recruit. Agencies could distribute and post recruitment information at the school while maintaining an open relationship with the school's administration. Another tool to entice prospective technology skilled people into the profession is to offer incentives.

Compensation for Tech Skills

In today's economic environment, technology professionals are compensated additionally for their expertise. Just as law enforcement agencies provide compensation incentives for specialty assignments, incentives for technology skills can be adopted. It is not uncommon for department's to compensate employees for college degrees. Additional compensation for computer related college degrees and certificates could be added to the base compensation for the degrees. The extra incentive may not only entice prospective technology graduates to the profession but also encourage current employees to receive formal technology related education. This type of incentive could enhance the overall technology capabilities and skills of your prospective and current workforce. If department's reward and recognize the value of computer related competencies, a percentage of the employees may respond and improve their skills. An additional incentive might include a keyboarding test. ~~Employees who keyboard at a specific rate would receive an incentive.~~ For example, an employee who types a minimum of 35 words per minute (WPM) would receive a \$100 per month incentive and employees who type 50 wpm would receive \$150 per month. Continued reliance on the keyboard as a technology tool for law enforcement may lead to entry level keyboarding skills tests.

Relevance of Current Standardized Police Tests

The standardized entry level written test of the past decades may become obsolete to a more comprehensive computer skills competency examination. The test would assess the candidate's ability and adaptability to the ever progressing technology environment. The candidate would not merely view a map and determine the quickest route to a location, but rather access a computerized mapping system and coordinate the response. Instead of viewing a photograph and relating details about the picture, candidates scan pictures into a scanner and simulate sending them to a team of patrol officers in the field. Rather than write an essay detailing the candidate's reasons for pursuing a career in law enforcement, the candidate develops a brief PowerPoint presentation highlighting the same information. These are but a few of the adaptations to entry level testing that may be implemented to test candidate's computer competency levels. Provide a segue to the conclusion; make this point end strongly...

Conclusion

Technology will continue to impact the manner in which law enforcement agencies deliver services to the communities they serve. Police departments will need to ensure the officers they employ are skilled to meet the technology demands. Strategies include, recruitment incentives adopted to attract a technology savvy candidate pool, police officer recruits tested for appropriate skill levels, skill based incentives for current workforce and marketing strategies directed towards technology institutions, conferences and tradeshow. The alternative is to continue along the same path and not respond to the

changing environment. The result could be a police culture rich in technology but lacking in personnel who can switch on the power. And as Abraham Lincoln once stated, “You can’t escape the responsibility of tomorrow by evading it today” echoed by Benjamin Franklin, one of the early tech-savvy Americans, who said, “An investment in knowledge always pays the best interest.”